

PROVIDENCE, R.I.

Small pox and the protective  
power of vaccination in the  
City of Providence. By E.M.

Snow. 1869.

*Snow, Edwin Miller, 1820-1888.*

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CITY DOCUMENT.

[No. 44.]

# SMALL POX

AND THE

## Protective Power of Vaccination

IN THE

CITY OF PROVIDENCE:

A REPORT TO THE BOARD OF ALDERMEN, APRIL 26, 1869

BY EDWIN M. SNOW, M. D.,

SUPERINTENDENT OF HEALTH.



PROVIDENCE:

HAMMOND, ANGELL & CO., PRINTERS TO THE CITY.

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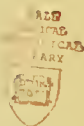
IN BOARD OF ALDERMEN, April 26, 1869.

READ: Whereupon it is ordered that the same be received and printed in pamphlet form for the use of the Board.

SAMUEL W. BROWN, CITY CLERK.



*Two  
Vacc*





# REPORT.

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OFFICE OF THE SUPERINTENDENT OF HEALTH, }  
PROVIDENCE April 26, 1869. }

*To the Honorable the Board of Aldermen:—*

GENTLEMEN: It seems to be proper that I should make a brief report to your Board, in relation to the Small Pox in the city, during the past winter. Though we have had very few cases of the disease, and no deaths from it, the experience of the last six months affords a remarkable illustration of the effects of preventive measures in this disease, and also furnishes a complete refutation of the idea, often promulgated by those ignorant of the subject, that vaccination has lost its protective power against small pox.

Within the last six months, ending with this date, the small pox has appeared in this city at four different times, and in four different localities.

*Origin of the Disease.* In one instance, the disease was brought from Milwaukee, Wisconsin; in the second, it was contracted by a secret and unauthorized visit to the small pox hospital; in the third instance, it was brought from New York city; and in the fourth, I have been unable to discover its origin.

*Localities.* In one case, it appeared in a thickly-settled neighborhood of foreign population, in a house occupied by four Irish families; next, it appeared in a house occupied by 75 to 80 colored people; next, in a narrow, thickly-crowded lane; and lastly, in the rear of a thickly-settled street.

*Cases of the Disease.* There have been in all fifteen cases of small pox in the city, during the last six months, of which all but four were more or less modified by previous vaccination. All were comparatively mild, and all recovered.

#### PREVENTIVE MEASURES USED.

1. At the first appearance of the disease on Whelden street, in November, I visited the cases, and proceeded to vaccinate thoroughly the whole neighborhood. In connection with Dr. Ely, we visited the Public School House near the city line, in North Providence, and the Catholic School in that vicinity, several times, and vaccinated in all two hundred and forty-six (246) children and others.

2. When the disease appeared in the house on Front street, occupied by colored persons, and also in the other localities named, I visited the places and saw that every person was vaccinated who was exposed to the disease, and who had not previously been fully protected.

3. The small pox hospital at Field's Point has been opened twice during the winter, and there have also been five cases of the disease in the city, that were not removed to the hospital. The expense of the hospital, for the whole season, has been four hundred and twenty dollars and seventy-three cents (\$420.73).

4. I have endeavored to awaken the attention of the people to the importance and necessity of vaccination, from time to time, by reporting in the daily papers, the existence and location of all cases of small pox that have appeared. This is in accordance with my uniform practice, since I have held the office of Superintendent of Health, now nearly fourteen years, and the results have shown that is a very important measure for the prevention of the disease.

5. From the first of November, 1868, to this date inclusive, we have recorded the vaccination of five hundred and nine (509) persons, including those vaccinated in my office, and in the neighborhood of Whelden street, and not including a con-

siderable number vaccinated in different places and not recorded. During the same period, six months to this date, I have given seven hundred and eighty (780) certificates of vaccination to children to attend the public schools.

6. I attended personally to all the cases of small pox that were sent to the hospital, with the exception of about two weeks, the first of December, when I was absent from the city. I made twenty-two (22) visits to the hospital, during the winter, besides numerous visits to cases in the city, and to houses for the purpose of vaccination.

#### RESULTS OF THE MEASURES ADOPTED.

1. No lives have been lost from small pox, in the city, during the winter.

2. Though the small pox has appeared at four different times, during the winter, and in four different localities, it has not spread in a single instance beyond the house in which it appeared, though they were all in localities peculiarly favorable to its propagation. It is certain that the vaccination, and other preventive measures adopted, were the sole causes of this remarkable result. Without those measures, there can be no doubt that the small pox would have spread, more or less, and would have prevailed in the city all winter.

3. These results in the prevention of small pox, during the past winter, are not exceptional; but are in accordance with our experience in this city, during the last fourteen years. During that period, from 1855 to 1868 inclusive, there have been only forty-five (45) deaths from small pox in the city of Providence, and the average population, for the whole period, has been more than 50,000. This gives an average of only three and two-tenths (3.2) deaths annually from small pox, and is only three-tenths of one per cent. of the total mortality.

It can be safely claimed that this remarkable exemption from this loathsome disease, for so long a period, has been wholly owing to preventive measures, of which vaccination is the chief, and by far the most important.

It should not be forgotten here, that this city is peculiarly exposed to this disease, being in connection, several times daily, with New York and Boston where the disease is generally present, and often fearfully prevalent. In fact, small pox has been brought to Providence from those cities more than once, and frequently several times, in each of the last fourteen years.

#### GENERAL REMARKS.

1. *Small Pox Hospital.* It will be noticed that the expenses of the small pox hospital amounted to \$420.73. This seems to be a large sum for the small number of patients; but when we consider the localities from which these patients were removed, and look at the results of their removal, it must be confessed that the opening of the hospital was a most wise precaution.

But it is a wrong, and a disgrace to the city that we have no more convenient provision for patients with this disease. Of the whole expense of the hospital, \$420.73, more than one fourth, or \$110.50, was for transportation of patients, provisions, and physician to the hospital. If we had had a convenient place, during the past winter, where the patients could have been cared for without extra expense for keeping house, and for transportation, the whole expense would not have exceeded one hundred dollars.

I always hesitate about sending patients to the hospital, on account of the distance, and the great extra expense, and am satisfied that in past years, I have sometimes hesitated to the injury of the public health.

Recent discoveries in the disinfection of small pox hospitals and clothing, and in the destruction of the poison of the disease, render it perfectly safe to have these hospitals, under suitable regulations, comparatively near to dwelling houses.

A suitable building could be erected, at slight expense, on the Dexter Asylum farm, and could be supplied with food and necessaries from the Asylum, with perfect safety to the inmates of the Asylum, and to the people in the vicinity. Such

a building would be a most valuable auxiliary in the prevention of the disease in the city, and would save the city much expense.

2. *Protective power of vaccination.* We often see statements in the public papers, that vaccination has lost its protective power against small pox, or that it has run out, implying that the vaccine virus has lost, either in kind or in degree, some of the properties that it possessed when first discovered. On account of an unusual prevalence of small pox, during the last fall and winter, in California, as well as in Chicago, St. Louis, and other of our midland cities, these statements in the newspapers have been more frequent than usual. It is probable that there are many persons in the community who are inclined to believe them, or at least, to think that there is some foundation for them. And yet there is not one particle of truth in them. The character and properties of vaccine virus are as perfect, and its protective power against small pox is as certain and effectual, in Providence, to-day, as it was when first discovered by Jenner.

*The proof of this* is seen, *first*, in the character and effects of the vaccine virus itself; and *second*, in the results of its application in the community.

1. *The vaccine virus itself.* Dr. Jenner gave minute instructions for vaccination; described precisely the character, properties, and local and constitutional effects of the vaccine virus; and gave a most exact and particular description of the progress and appearance of the vaccine vesicle, day by day, from the insertion of the virus until the scar is healed.

The operation done in the same way, in Providence, to day, produces precisely the same local and constitutional effects, and the most skillful and minute, professional examination of the vesicle, day by day, cannot discover the slightest variation from Dr. Jenner's description.

2. *Results of vaccination.* The results of vaccination in giving protection from small pox, are precisely the same here now, as they were in the time of Jenner.



We have already seen that, in Providence, during the past winter, small pox has been stopped four different times, *by vaccination*. No one can believe that if there had been no protective power in vaccination, the disease could have been arrested under the circumstances in which it appeared. But there is more direct and positive proof than this, of the protective power of vaccination at the present time.

During this present month of April, 1869, I have had a case of small pox in a family where there were three persons wholly unprotected, and one other person with only partial protection. I vaccinated them all, and though they remained in the family, and went freely in and out of the room with the small pox, until recovery, not one of them had the slightest symptoms of the disease. Was there any evidence of a weakened protective power of vaccination in that case? And yet, during this same time, an article appeared in one of our daily papers taking the ground that vaccination had lost its protective power against small pox. But this is no exceptional case. I have had scores of similar cases during the last fourteen years.

It may be assumed, positively, that the remarkable exemption from small pox, enjoyed by this city during the last fourteen years, as already described, has been wholly owing to the protective power of vaccination.

The following facts, from the experience of the past fourteen years, furnish additional evidence upon this subject:—

During the fourteen years, nearly, July, 1855, to April, 1869, ten thousand four hundred and sixty-four (10,464) persons have been vaccinated in my office. Very many more, of course, have been vaccinated, in the same time, by other physicians in the city.

During the same fourteen years, I have myself given certificates of vaccination to sixteen thousand three hundred and thirty-two (16,332) children to enter the public schools. Probably nine-tenths of these certificates were given by me, solely from the evidence furnished by the vaccination scar, and be-



cause I had full faith in the protection furnished by vaccination against the small pox. Now note the result!

During these same fourteen years I have known of nearly every case of small pox in Providence, and have visited the greater portion of them myself, and I have never, during this time, seen or heard of a single case of small pox in any scholar in the public schools, who had received a vaccination certificate. These facts certainly seem to prove that vaccination has not lost its protective power.

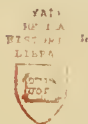
But it cannot be necessary to say more upon this point. My confidence in vaccination, when properly performed, is so great that I would freely pledge myself to give any person, always for the time being and generally for life, complete and absolute protection against small pox, however much exposed.

The reasons why small pox has been so prevalent in California, and in some of our midland cities, during the past year, are perfectly well understood. They are not because vaccination has lost any protective power; but because vaccination has been neglected, or imperfectly applied. For the same reasons, small pox is quite prevalent in New York city, at the present time, and for the same reasons, we frequently have the disease, though to a much less extent, in this city.

Respectfully,

EDWIN M. SNOW, M. D.,

*Superintendent of Health.*















Accession no.

15586

Author

Providence. Board  
of health.

Small pox and ...

Call no.vaccination ...  
1869.

Inoculation  
Vaccination

